

# INTERNATIONAL SEARCH REPORT

Inter Application No  
PCT/EP 2004/008683

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/415 C12N15/82 A01H5/00 C12N15/29

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, Sequence Search, EMBASE, WPI Data, PAJ, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.    |
|------------|---|--------------------------|
| X          | ROSSI M ET AL: "The nematode resistance gene Mi of tomato confers resistance against the potato aphid"<br>PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US,<br>vol. 95, no. 17,<br>18 August 1998 (1998-08-18), pages<br>9750-9754, XP002262826<br>ISSN: 0027-8424<br>cited in the application<br>the whole document<br>-/-- | 1-19,<br>21-31,<br>34-43 |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

2 November 2004

Date of mailing of the international search report

24/11/2004

Name and mailing address of the ISA

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |  |                          |
|--|--|--------------------------|
| Category *   | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No.    |
| X  | <p>&amp; DATABASE EMBL 'Online!<br/> 19 August 1998 (1998-08-19), "Lycopersicon<br/> esculentum disease resistance gene homolog<br/> Mi-copy2 gene, complete cds; resistance<br/> gene pseudogene, complete sequence;<br/> disease resistance gene homolog Mi-copy1<br/> gene, complete cds; and unknown gene."<br/> retrieved from EBI accession no.<br/> EM_PRO:U81378<br/> Database accession no. U81378</p>  | 1-19,<br>21-31,<br>34-43 |
| X  | <p>WO 98/06750 A (ZABEAU MARC ; SIMONS GUUS<br/> (NL); KEYGENE NV (NL); VOS PIETER (NL);<br/> WIJB) 19 February 1998 (1998-02-19)<br/> page 13, line 5 - line 18; figures 5,7</p>  | 1-19,<br>21-31,<br>34-43 |
| X  | <p>MILLIGAN S B ET AL: "The root knot<br/> nematode resistance gene Mi from tomato is<br/> a member of the leucine zipper, nucleotide<br/> binding, leucine-rich repeat family of<br/> plant genes"<br/> PLANT CELL, AMERICAN SOCIETY OF PLANT<br/> PHYSIOLOGISTS, ROCKVILLE, MD, US,<br/> vol. 10, no. 8, August 1998 (1998-08),<br/> pages 1307-1319, XP002262827<br/> ISSN: 1040-4651<br/> cited in the application<br/> page 1311, column 2, paragraph 2 - page<br/> 1315, column 2, paragraph 1</p> | 1-19,<br>21-31,<br>34-43 |
| X  | <p>DATABASE EMBL 'Online!<br/> 13 November 2001 (2001-11-13), "Solanum<br/> nigrum NBS-LRR pseudogene, partial<br/> sequence."<br/> XP002262829<br/> retrieved from EBI accession no.<br/> EM_PRO:AY055116<br/> Database accession no. AY055116<br/> cited in the application<br/> abstract</p>  | 1-43                     |
| X  | <p>SONG J ET AL: "Gene RB cloned from<br/> Solanum bulbocastanum confers broad<br/> spectrum resistance to potato late blight"<br/> PROCEEDINGS OF THE NATIONAL ACADEMY OF<br/> SCIENCES OF USA, NATIONAL ACADEMY OF<br/> SCIENCE. WASHINGTON, US,<br/> vol. 100, no. 16,<br/> 5 August 2003 (2003-08-05), pages<br/> 9128-9133, XP002262828<br/> ISSN: 0027-8424<br/> cited in the application<br/> figure 4</p>  | 1-43                     |
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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |   |                       |
|--|---|-----------------------|
| Category *   | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
| X  | BRADEEN J M ET AL: "CONCOMITANT REITERATIVE BAC WALKING AND FINE GENETIC MAPPING ENABLE PHYSICAL MAP DEVELOPMENT FOR THE BROAD-SPECTRUM LATE BLIGHT RESISTANCE REGION, RB"<br>MGG - MOLECULAR GENETICS AND GENOMICS, SPRINGER VERLAG, BERLIN, DE, vol. 269, no. 5, August 2003 (2003-08), pages 603-611, XP009021738<br>ISSN: 1617-4615<br>the whole document | 1-43                  |
| P,X  | -----<br>EP 1 334 979 A (K WEEK EN RES BEDRIJF AGRICO B) 13 August 2003 (2003-08-13)<br>the whole document  | 1-43                  |
| P,X  | -----<br>VAN DER VOSSEN EDWIN ET AL: "An ancient R gene from the wild potato species Solanum bulbocastanum confers broad-spectrum resistance to Phytophthora infestans in cultivated potato and tomato."<br>PLANT JOURNAL, vol. 36, no. 6, December 2003 (2003-12), pages 867-882, XP002303445<br>ISSN: 0960-7412<br>the whole document<br>-----              | 1-43                  |

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Interr Application No  
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| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date         |
|---|---------------------|----------------------------|-----------------------------|
| WO 9806750                                | A                   | 19-02-1998                 | EP 0823481 A1 11-02-1998    |
|   |                     |                            | AT 279523 T 15-10-2004      |
|   |                     |                            | AU 735063 B2 28-06-2001     |
|   |                     |                            | AU 4454097 A 06-03-1998     |
|   |                     |                            | BR 9711048 A 11-01-2000     |
|   |                     |                            | CA 2262411 A1 19-02-1998    |
|   |                     |                            | WO 9806750 A2 19-02-1998    |
|   |                     |                            | EP 0937155 A2 25-08-1999    |
|   |                     |                            | JP 2001500006 T 09-01-2001  |
|   |                     |                            | KR 2000029896 A 25-05-2000  |
|   |                     |                            | NZ 334077 A 29-09-2000      |
|   |                     |                            | PL 331542 A1 19-07-1999     |
|   |                     |                            | RU 2221044 C2 10-01-2004    |
|   |                     |                            | TR 9900277 T2 21-05-1999    |
|   |                     |                            | US 6613962 B1 02-09-2003    |
| EP 1334979                                | A                   | 13-08-2003                 | EP 1334979 A1 13-08-2003    |
|   |                     |                            | CA 2475467 A1 14-08-2003    |
|   |                     |                            | WO 03066675 A1 14-08-2003   |
|   |                     |                            | US 2003221215 A1 27-11-2003 |